

# INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/SE2004/000861**

**Box No. I** Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:

a. type of material

- ☒ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☒ in written format  
☒ in computer readable form

c. time of filing/furnishing

- ☒ contained in the international application as filed  
☐ filed together with the international application in computer readable form  
☒ furnished subsequently to this Authority for the purposes of search

2. ☒ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments:

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## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: **10 (partly)**  
because they relate to subject matter not required to be searched by this Authority, namely:  
**see next sheet**
2. ☒ Claims Nos.: **8-9 (partly)**  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:  
**see next sheet**
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

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## Box II.1

Claim 10 relates to methods of treatment of the human or animal body by surgery or by therapy or diagnostic methods practiced on the human or animal body (PCT Rule 39.1(iv)). The expression "obtaining a ..... sample from an individual" used in claim 10, is open for various interpretations, and can include the actual taking of a body sample. The claim has been searched with the assumption that the method is performed in vitro.

## Box II.2

Present claim 8 relates to a method comprising the use of compounds defined by reference to a desirable characteristic or property, namely the compound being identified according to a screening method. The claim covers all such methods comprising the use of compounds having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for only a very limited number of suitable compounds. In the present case, the claim so lacks support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claim also lacks clarity (Article 6 PCT). An attempt is made to define the compound by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible.

Present claim 9 relates to the use of compounds defined by reference to a desirable characteristic or property, namely the compound being able to modulate the activity or amount of DLG5, for preparing a medicament for the treatment of IBD. The claim covers all such uses of any compounds having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for only a very limited number of suitable compounds. In the present case, the claim so lacks support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claim also lacks clarity (Article 6 PCT). An attempt is made to define the compound by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible.

.../...

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Consequently, the search has been carried out for those parts of the claims 8 and 9 which appear to be clear, supported and disclosed, namely those parts relating to antisense molecules, antibodies against DLG5, the gld5 gene, ribozyme molecules, siRNA molecules and triple-helix aptamers. (Page 32, lines 1-5; page 35, line 28-page 36, line 15; page 37, lines 31-32; page 39, lines 1-4)

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established will not be the subject of an international preliminary examination (Rule 66.1(e) PCT). This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G01N 33/68, G01N 33/53, C12Q 1/68, A61K 38/17, A61K 39/395, A61K 48/00, A61P 29/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: G01N, C12Q, A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI-DATA, PAJ, BIOSIS, MEDLINE, EMBASE, CHEM. ABS DATA

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Purmonen, Sami et al, "HDLG5/KIAA0583, Encoding a maguk-family protein, is a primary progesterone target gene in breast cancer cells", Int. J. Cancer, Volume 102, 2002, page 1 - page 6, abstract, figure 5  --	1,5,7
X	WO 0242422 A2 (ARBOR VITA CORPORATION), 30 May 2002 (30.05.2002), page 4, line 22 - line 32; page 10, line 3; page 11, line 9; page 11, line 16 - line 17; page 16, line 14 - line 19; page 49; page 84, line 24 - line 30; page 100, line 31 - page 101, line 8, page 154, line 12 - page 20  --	1-9

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

24 Sept 2004

Date of mailing of the international search report

28-09-2004

Name and mailing address of the ISA/

Swedish Patent Office

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 0216439 A2 (HYSEQ, INC.), 28 February 2002 (28.02.2002), page 4, line 29 - line 32; page 5, line 19 - line 35; page 22, line 30; page 38, line 2 - line 13; page 55, line 30 - page 57, line 3; page 58, line 1 - line 20; page 62, line 33 - page 63, line 21; page 65, line 32 - page 66, line 1;	1-9
X	page 89, line 8 - page 91, line 6; page 157, SEQ. ID. NO. 1946; page 415, SEQ. ID. NO. 1946 --	1-9
X	WO 03042661 A2 (EOS BIOTECHNOLOGY, INC.), 22 May 2003 (22.05.2003), page 3, line 26 - page 4, line 4; page 20, line 32 - page 21, line 6; page 65, line 25 - line 29; page 73, line 2 - page 79, line 30; page 84, line 1 - line 65; page 126, line 13 --	1-9
A	Hampe, Jochen et al, "A genomewide Analysis Provides Evidence for Novel Linkages in Inflammatory Bowel Disease in a Large European Cohort", Am. J. Hum. Genet., Volume 64, 1999, page 808 - page 816, summary; table 3; page 811, column 1, paragraph 2 --	1-10
P,X	Stoll, Monika et al, "Genetic variation in DLG5 is associated with inflammatory bowel disease", Nature genetics, Volume 36, no. 5, May 2004, page 476 - page 480 -- -----	1-10

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Information on patent family members

03/09/2004

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WO	0242422	A2	30/05/2002	AU	3933602	A	03/06/2002
				EP	1387692	A	11/02/2004
WO	0216439	A2	28/02/2002	AU	4528001	A	17/09/2001
				AU	4549101	A	17/09/2001
				AU	7784001	A	04/03/2002
				CA	2402293	A	13/09/2001
				EP	1261743	A	04/12/2002
				US	20030165881	A	04/09/2003
				US	20030180745	A	25/09/2003
				US	20030228584	A	11/12/2003
				WO	0166558	A	13/09/2001
				WO	0166689	A	13/09/2001
				AU	3300301	A	07/08/2001
				CA	2398251	A	02/08/2001
				EP	1261735	A	04/12/2002
				US	20040048249	A	11/03/2004
				WO	0155335	A	02/08/2001
WO	03042661	A2	22/05/2003	CA	2438030	A	10/10/2002
				CA	2444691	A	31/10/2002
				CA	2451465	A	27/12/2002
				CA	2453098	A	16/01/2003
				CA	2459219	A	27/03/2003
				CA	2467433	A	22/05/2003
				EP	1408811	A	21/04/2004
				EP	1434881	A	07/07/2004
				US	20030124579	A	03/07/2003
				US	20030232350	A	18/12/2003
				US	20040005563	A	08/01/2004
				US	20040076955	A	22/04/2004
				WO	02079492	A	10/10/2002
				WO	02086443	A	31/10/2002
				WO	02098358	A	12/12/2002
				WO	02102235	A	27/12/2002
				WO	03003906	A	16/01/2003
				WO	03025138	A	27/03/2003